

JAN 10 2007

PATENT APPLN. NO. 10/743,747  
RESPONSE UNDER 37 C.F.R. §1.111

PATENT  
NON-FINAL

REMARKS

Claim 1 has been amended to include the following additional limitations:

(A) a rib is formed on an outer circumferential surface of the elastic tube;

(B) a concave portion for receiving the rib and fixing the elastic tube is formed on an inner wall of the case; and

(C) the elastic tube is water-tightly contacted with the inner wall of the case by the elastic force of the tube, thereby securely fixing the elastic tube in the case.

Limitations (A) and (B) are supported in the specification of the present application in paragraphs [0029], [0037 and [0039] and by, *inter alia*, original claims 2 and 10. Limitation (C) is supported *inter alia* in the specification of the present applications in lines 1-3 of paragraph [0036]. Claims 2, 6, 9, 10, 13 and 14 have been canceled in view of the amendment to claim 1 since they would not further limit the claim.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over English translated copy of FR 2,267,138 (hereinafter: "FR '138") in view of Bogart (U.S. Patent No. 4,308,654). Claims 1-2 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR 2 542 203 (hereinafter: "FR '203") in

view of Bogart. Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spekle et al. (U.S. Patent No. 4,219,426) (hereinafter: "Spekle").

These rejections are moot in view of the amendment to claim 1 to include the limitations of claim 10, which is not included in the rejection.

Claims 9-10 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR '203 in view of Bogart as applied to claims 1-2 and 5-6 in the above rejections, and further in view of Rekers (U.S. Patent No. 6,251,275).

FR '203 is identified by the Office as disclosing a dialyzer which includes each of the limitations of claim 1 with the exception of the lubricant provided between an outer surface of the elastic tube and the inner wall of the case of the dialyzer. Bogart is identified as teaching the use of a lubricant to facilitate insertion of a flexible envelope containing a hollow fiber bundle into a cylindrical housing. Rekers is identified as disclosing circumferential grooves in a concave shape on the inner wall of the housing to provide additional permeate channels. The grooves of Rekers, as noted by the Office, provide additional permeate channels to communicate with the permeate chamber. The grooves allow for additional collection and discharge of permeate

without the effective membrane surface. The Office states that "[i]t would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide concave portions on the inner wall of the case of Fr '203 in view of Bogart to provide additional permeate channels to communicate with permeate chamber as suggested by Rekers."

Applicants respectfully submit that the combination of FR '203, Bogart and Rekers proposed by the Office would not result in the dialyzer of the present invention as defined by amended claim 1. Since the elastic tube of the present invention is water-tightly and securely fixed to the inner wall of the case, the concave portions do not communicate with the dialysate flow path. As described in paragraph [0047] of the specification and shown in Fig. 6 of the present application, the elastic tube decreases the cross-sectional area of the dialysate flow path resulting in an abrupt increase in the pressure of the dialysate flow path. The increase in the pressure of the dialysate flow path increases the transmembrane pressure to allow the internal filtration and internal backfiltration of a large amount of fluid. Such an increase in pressure would not result if the concave portions of the case communicated with the dialysate flow path as in Rekers.

Furthermore, there is no teaching or suggestion in the combination of FR '203, Bogart and Rekers to securely fix the elastic tube in a water-tight manner. Since the motivation to combine the references is to provide additional permeate channels, a person of ordinary skill in the art would not be motivated to fix the elastic tube in a water-tight manner against the case of the invention of FR '203 preventing communication of the grooves with the permeate chamber.

Removal of the 35 U.S.C. 103(a) rejections of the claims is believed to be in order and is respectfully requested.

The foregoing is believed to be a complete and proper response to the Office Action dated August 10, 2006, and is believed to place this application in condition for allowance. If, however, minor issues remain that can be resolved by means of a telephone interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number indicated below.

In the event that this paper is not considered to be timely filed, applicants hereby petition for an appropriate extension of time. The fee for any such extension may be charged to our Deposit Account No. 111833.

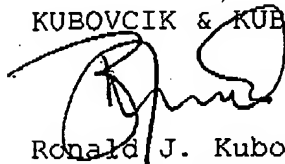
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In the event any additional fees are required, please also  
charge our Deposit Account No. 111833.

Respectfully submitted,

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